Figure 1A

```
ATGTCGAAAA TTGAACTAAA ACAACTATCT TTTGCCTATG ATAATCAAGA AGTATTGCTT    60
TTTGATCAGG CAAATATCAC GATGGATACC AATTGGAAAT TAGGATTGAT TGGCCGCAAT   120
GGCCGTGGGA AAACAACCTT ATTAAGATTG TTACAAAAAC AGTTGGATTA CCAAGGAGAG   180
ATTCTTCATC AAGTCGATTT CGTCTATTTT CCACAAACAG TTGCAGAAGA ACAACAGCTC   240
ACTTATTATG TCTTACAAGA GGTGACTTCT TTTGAACAGT GGGAATTAGA ACGAGAATTA   300
ACGCTTTTAA ACGTTGATCC TGAAGTTTTA TGGCGGCCCT TTTCTTCTTT ATCAGGCGGC   360
GAAAAGACGA AAGTTTTATT AGGTCTTCTT TTTATTGAAG AAAATGCCTT TCCTTTAATT   420
GACGAGCCAA CAAATCATTT AGATCTAGCT GGCAGACAAC AAGTGGCTGA ATATTTGAAG   480
AAAAAGAAAC ACGGGTTTAT TTTAGTCAGC CACGATCGGG CATTTGTTGA TGAAGTGGTT   540
GATCATATTT TGGCGATTGA AAAAAGTCAA TTGACGCTGT ATCAAGGGAA TTTTTCTATT   600
TATGAAGAGC AAAAAAAATT AAGAGATGCT TTTGAACTAG CAGAAAATGA AAAAATCAAA   660
AAAGAAGTCA ATCGCTTGAA AGAAACCGCT CGTAAAAAAG CGGAATGGTC GATGAACCGT   720
GAAGGTGATA AGTACGGCAA CGCTAAGGAA AAAGGGAGCG GGGCGATTTT TGATACAGGA   780
GCCATTGGTG CCCGGGCAGC GCGCGTAATG AAGCGCTCGA AACACATTCA ACAACGCGCC   840
GAAACACAAT TAGCAGAAAA AGAAAAACTA TTAAAAGATC TTGAGTATAT TGATCCTTTG   900
TCAATGGATT ATCAGCCAAC GCATCACAAA ACATTATTGA CGGTGGAAGA GCTTCGTCTA   960
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Figure 1B

GGCTACGAGA AAAATTGGCT ATTTGCGCCA CTTTCTTTTT CAATAAACGC GGGAGAAATT 1020

GTTGGAATAA CAGGGAAAAA TGGCTCAGGA AAATCGAGCT TAATTCAGTA TTTATTGGAT 1080

AATTTTTCTG GGGATTCAGA AGGCGAAGCC ACTTTGGCTC ACCAATTAAC CATTTCTTAT 1140

GTGCGCCAAG ATTATGAAGA CAATCAAGGA ACTTTATCCG AATTTGCAGA GAAAAATCAG 1200

TTAGATTACA CTCAATTTTT AAATAACTTA CGAAAACTTG GGATGGAGCG CGCCGTTTTC 1260

ACTAATCGAA TTGAACAAAT GAGTATGGGG CAACGGAAAA AAGTCGAAGT AGCCAAATCA 1320

TTGTCTCAAT CAGCTGAACT TTATATTTGG GATGAACCCC TTAATTACTT GGATGTATTT 1380

AATCATCAAC AATTAGAAGC GCTAATCTTA TCTGTGAAGC CTGCAATGCT AGTGATTGAG 1440

CATGATGCAC ATTTCATGAA GAAAATAACA GATAAAAAAA TTGTCTTGAA ATCATAA 1497

Figure 2A

MetSerLysIleGluLeuLysGlnLeuSerPheAlaTyrAspAsnGlnGluValLeuLeu 20
PheAspGlnAlaAsnIleThrMetAspThrAsnTrpLysLeuGlyLeuIleGlyArgAsn 40
GlyArgGlyLysThrThrLeuLeuArgLeuLeuGlnLysGlnLeuAspTyrGlnGlyGlu 60
IleLeuHisGlnValAspPheValTyrPheProGlnThrValAlaGluGluGlnGlnLeu 80
ThrTyrTyrValLeuGlnGluValThrSerPheGluGlnTrpGluLeuGluArgGluLeu 100
ThrLeuLeuAsnValAspProGluValLeuTrpArgProPheSerSerLeuSerGlyGly 120
GluLysThrLysValLeuLeuGlyLeuLeuPheIleGluGluAsnAlaPheProLeuIle 140
AspGluProThrAsnHisLeuAspLeuAlaGlyArgGlnGlnValAlaGluTyrLeuLys 160
LysLysLysHisGlyPheIleLeuValSerHisAspArgAlaPheValAspGluValVal 180
AspHisIleLeuAlaIleGluLysSerGlnLeuThrLeuTyrGlnGlyAsnPheSerIle 200
TyrGluGluGlnLysLysLeuArgAspAlaPheGluLeuAlaGluAsnGluLysIleLys 220
LysGluValAsnArgLeuLysGluThrAlaArgLysLysAlaGluTrpSerMetAsnArg 240
GluGlyAspLysTyrGlyAsnAlaLysGluLysGlySerGlyAlaIlePheAspThrGly 260
AlaIleGlyAlaArgAlaAlaArgValMetLysArgSerLysHisIleGlnGlnArgAla 280
GluThrGlnLeuAlaGluLysGluLysLeuLeuLysAspLeuGluTyrIleAspProLeu 300
SerMetAspTyrGlnProThrHisHisLysThrLeuLeuThrValGluGluLeuArgLeu 320

Figure 2B

GlyTyrGluLysAsnTrpLeuPheAlaProLeuSerPheSerIleAsnAlaGlyGluIle 340
ValGlyIleThrGlyLysAsnGlySerGlyLysSerSerLeuIleGlnTyrLeuLeuAsp 360
AsnPheSerGlyAspSerGluGlyGluAlaThrLeuAlaHisGlnLeuThrIleSerTyr 380
ValArgGlnAspTyrGluAspAsnGlnGlyThrLeuSerGluPheAlaGluLysAsnGln 400
LeuAspTyrThrGlnPheLeuAsnAsnLeuArgLysLeuGlyMetGluArgAlaValPhe 420
ThrAsnArgIleGluGlnMetSerMetGlyGlnArgLysLysValGluValAlaLysSer 440
LeuSerGlnSerAlaGluLeuTyrIleTrpAspGluProLeuAsnTyrLeuAspValPhe 460
AsnHisGlnGlnLeuGluAlaLeuIleLeuSerValLysProAlaMetLeuValIleGlu 480
HisAspAlaHisPheMetLysLysIleThrAspLysLysIleValLeuLysSer 498

Figure 3A

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ATGAAAGAGA TCGTAACATT AACAAACGTT AGCTATGAAG TAAAGGATCA AACTGTTTTT    60
AAACATGTAA ACGCCAGTGT TCAGCAAGGA GATATCATTG GGATTATCGG CAAAAACGGC   120
GCTGGGAAAT CTACGTTGCT GCACCTCATT CACAATGACT TAGCCCCTGC ACAGGGTCAA   180
ATCCTTCGGA AGGATATAAA ACTGGCTTTG GTTGAACAGG AAACCGCGGC GTATTCCTTT   240
GCGGATCAGA CACCTGCCGA AAAGAAGTTA CTGGAGAAAT GGCATGTGCC TCTTCGTGAT   300
TTTCATCAGT TAAGCGGCGG TGAAAAACTG AAAGCGCGGC TGGCGAAAGG ACTATCAGAG   360
GATGCAGATC TGCTGCTGTT AGATGAACCG ACAAACCACC TTGATGAAAA AAGCTTGCAA   420
TTTCTCATCC AACAGCTGAA ACATTATAAC GGCACTGTGA TTCTCGTTTC TCACGATCGA   480
TATTTTTTAG ACGAAGCCGC AACAAAAATA TGGTCGCTTG AGGATCAGAC GCTGATTGAA   540
TTCAAAGGGA ATTACTCCGG GTATATGAAG TTCCGGGAGA AGAAAAGACT CACCCAGCAG   600
CGTGAATATG AAAAGCAGCA AAAAATGGTT GAACGGATTG AAGCACAAAT GAATGGGCTC   660
GCTTCTTGGT CGGAAAAAGC CCATGCTCAA TCGACGAAAA AGGAAGGGTT TAAAGAATAT   720
CACCGGGTAA AAGCGAAGCG TACGGATGCC CAGATAAAAT CCAAGCAGAA GCGGCTTGAA   780
AAAGAGCTTG AAAAAGCAAA GGCGGAACCC GTTACCCCAG AATATACAGT CCGCTTTTCA   840
ATCGATACAA CCCACAAAAC AGGAAAACGT TTTTTAGAAG TTCAGAATGT AACAAAAGCG   900
TTTGGAGAAA GGACTCTCTT TAAAAACGCA AACTTTACAA TTCAGCACGG CGAAAAGGTT   960
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Figure 3B

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GCGATCATAG GCCCCAATGG CAGCGGAAAA ACGACATTAC TGAACATCAT TCTGGGACAG   1020
GAAACAGCAG AAGGAAGTGT ATGGGTGTCG CCGTCCGCAA ACATCGGCTA TTTAACGCAG   1080
GAGGTGTTTG ATTTGCCTTT AGAACAAACA CCGGAAGAGT TATTTGAGAA TGAAACATTC   1140
AAAGCAAGGG GGCACGTTCA AAATCTGATG AGGCACTTAG GTTTTACAGC CGCCCAATGG   1200
ACTGAACCGA TCAAGCATAT GAGTATGGGT GAGCGTGTAA AGATCAAGCT GATGGCATAT   1260
ATTCTGGAGG AAAAAGACGT GCTGATTTTA GATGAGCCGA CAAACCATCT CGACCTGCCG   1320
TCACGCGAAC AGCTGGAAGA AACACTGTCA CAATACAGCG GCACATTGCT GGCGGTTTCA   1380
CATGACCGAT ACTTTCTCGA AAAAACAACA AACAGTAAAC TCGTCATCTC AAACAACGGC   1440
ATCGAAAAGC AGTTAAACGA CGTTCCTTCA GAAAGAAATG AGCGGGAGGA GCTTCGGTTA   1500
AAGCTTGAGA CAGAAAGACA AGAAGTGCTG GGAAAGCTCA GTTTTATGAC GCCAAATGAT   1560
AAAGGGTATA AGGAGCTTGA TCAGGCTTTC AATGAGCTTA CGAAACGAAT AAAAGAGCTG   1620
GATCATCAAG ACAAAAAAGA CTGA                                          1644
```

Figure 4A

MetLysGluIleValThrLeuThrAsnValSerTyrGluValLysAspGlnThrValPhe 20

LysHisValAsnAlaSerValGlnGlnGlyAspIleIleGlyIleIleGlyLysAsnGly 40

AlaGlyLysSerThrLeuLeuHisLeuIleHisAsnAspLeuAlaProAlaGlnGlyGln 60

IleLeuArgLysAspIleLysLeuAlaLeuValGluGlnGluThrAlaAlaTyrSerPhe 80

AlaAspGlnThrProAlaGluLysLysLeuLeuGluLysTrpHisValProLeuArgAsp 100

PheHisGlnLeuSerGlyGlyGluLysLeuLysAlaArgLeuAlaLysGlyLeuSerGlu 120

AspAlaAspLeuLeuLeuLeuAspGluProThrAsnHisLeuAspGluLysSerLeuGln 140

PheLeuIleGlnGlnLeuLysHisTyrAsnGlyThrValIleLeuValSerHisAspArg 160

TyrPheLeuAspGluAlaAlaThrLysIleTrpSerLeuGluAspGlnThrLeuIleGlu 180

PheLysGlyAsnTyrSerGlyTyrMetLysPheArgGluLysLysArgLeuThrGlnGln 200

ArgGluTyrGluLysGlnGlnLysMetValGluArgIleGluAlaGlnMetAsnGlyLeu 220

AlaSerTrpSerGluLysAlaHisAlaGlnSerThrLysLysGluGlyPheLysGluTyr 240

HisArgValLysAlaLysArgThrAspAlaGlnIleLysSerLysGlnLysArgLeuGlu 260

LysGluLeuGluLysAlaLysAlaGluProValThrProGluTyrThrValArgPheSer 280

IleAspThrThrHisLysThrGlyLysArgPheLeuGluValGlnAsnValThrLysAla 300

PheGlyGluArgThrLeuPheLysAsnAlaAsnPheThrIleGlnHisGlyGluLysVal 320

Figure 4B

AlaIleIleGlyProAsnGlySerGlyLysThrThrLeuLeuAsnIleIleLeuGlyGln 340
GluThrAlaGluGlySerValTrpValSerProSerAlaAsnIleGlyTyrLeuThrGln 360
GluValPheAspLeuProLeuGluGlnThrProGluGluLeuPheGluAsnGluThrPhe 380
LysAlaArgGlyHisValGlnAsnLeuMetArgHisLeuGlyPheThrAlaAlaGlnTrp 400
ThrGluProIleLysHisMetSerMetGlyGluArgValLysIleLysLeuMetAlaTyr 420
IleLeuGluGluLysAspValLeuIleLeuAspGluProThrAsnHisLeuAspLeuPro 440
SerArgGluGlnLeuGluGluThrLeuSerGlnTyrSerGlyThrLeuLeuAlaValSer 460
HisAspArgTyrPheLeuGluLysThrThrAsnSerLysLeuValIleSerAsnAsnGly 480
IleGluLysGlnLeuAsnAspValProSerGluArgAsnGluArgGluGluLeuArgLeu 500
LysLeuGluThrGluArgGlnGluValLeuGlyLysLeuSerPheMetThrProAsnAsp 520
LysGlyTyrLysGluLeuAspGlnAlaPheAsnGluLeuThrLysArgIleLysGluLeu 540
AspHisGlnAspLysLysAsp 547